

Title (en)  
RNA APTAMERS AGAINST TRANSFERRIN RECEPTOR (TFR)

Title (de)  
RNA-APTAMERE GEGEN TRANSFERRIN-REZEPTOR (TFR)

Title (fr)  
APTAMÈRES D'ARN DIRIGÉS CONTRE LES RÉCEPTEURS DE LA TRANSFERRINE (TFR)

Publication  
**EP 3206719 A4 20180117 (EN)**

Application  
**EP 15850028 A 20151015**

Priority  
• US 201462064310 P 20141015  
• US 2015055792 W 20151015

Abstract (en)  
[origin: WO2016061386A1] Provided herein, inter alia, are nucleic acid compounds capable of binding transferrin receptor on a cell and internalizing into said cell. The compositions provided herein may be useful for delivering therapeutic and diagnostic agents to a cell. Further provided are pharmaceutical compositions and methods of treatment using nucleic acid compounds provided herein.

IPC 8 full level  
**A61K 48/00** (2006.01); **C07H 21/02** (2006.01)

CPC (source: EP KR US)  
**A61K 31/7105** (2013.01 - EP US); **A61K 31/713** (2013.01 - EP US); **A61K 45/06** (2013.01 - US); **A61K 47/26** (2013.01 - KR); **A61K 47/549** (2017.07 - EP KR US); **A61K 51/0491** (2013.01 - KR); **A61P 35/00** (2017.12 - EP); **C07K 14/70582** (2013.01 - EP KR US); **C12N 15/115** (2013.01 - EP KR US); **G01N 33/5308** (2013.01 - US); **G01N 33/57492** (2013.01 - US); **C12N 2310/16** (2013.01 - EP KR US); **C12N 2310/322** (2013.01 - KR); **C12N 2310/351** (2013.01 - EP KR US); **C12N 2310/3519** (2013.01 - EP KR US); **C12N 2310/3533** (2013.01 - KR); **C12N 2320/31** (2013.01 - EP US); **G01N 2333/70582** (2013.01 - US)

Citation (search report)  
• [X] WO 2004026260 A2 20040401 - ARCHEMIX CORP [US], et al  
• [A] WO 2013163303 A2 20131031 - EINSTEIN COLL MED [US]  
• [A] SAMANTHA E. WILNER ET AL.: "An RNA alternative to human Transferrin: a new tool for targeting human cells", MOLECULAR THERAPY - NUCLEIC ACIDS, vol. 1, no. 5, 1 May 2012 (2012-05-01), pages e21, XP055274440, DOI: 10.1038/mtna.2012.14  
• [A] JING HU ET AL.: "Inhibition of monocyte adhesion to brain-derived endothelial cells by dual functional RNA chimeras", MOLECULAR THERAPY - NUCLEIC ACIDS, vol. 3, 1 January 2014 (2014-01-01), GB, pages e209, XP055433917, ISSN: 2162-2531, DOI: 10.1038/mtna.2014.60  
• [A] DAVID PORCIANI ET AL.: "Two interconvertible folds modulate the activity of a DNA aptamer against Transferrin Receptor", MOLECULAR THERAPY - NUCLEIC ACIDS, vol. 3, 1 January 2014 (2014-01-01), GB, pages e144, XP055433927, ISSN: 2162-2531, DOI: 10.1038/mtna.2013.71  
• [A] CHAOFENG MU ET AL.: "Solubilization of flurbiprofen into aptamer-modified PEG-PLA micelles for targeted delivery to brain-derived endothelial cells in vitro", JOURNAL OF MICROENCAPSULATION, vol. 30, no. 7, 21 March 2013 (2013-03-21), GB, pages 701 - 708, XP055433937, ISSN: 0265-2048, DOI: 10.3109/02652048.2013.778907  
• [A] CHI-HONG CHEN ET AL.: "Aptamer-based endocytosis of a lysosomal enzyme", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA, vol. 105, no. 41, 14 October 2008 (2008-10-14), pages 15908 - 15913, XP055433939, Retrieved from the Internet <URL:http://www.pnas.org/content/105/41/15908.full.pdf?with-ds=yes> [retrieved on 20171211]  
• See references of WO 2016061386A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2016061386 A1 20160421**; CN 107249644 A 20171013; EP 3206719 A1 20170823; EP 3206719 A4 20180117; EP 3206719 B1 20200408; JP 2017533728 A 20171116; JP 6661645 B2 20200311; KR 20170107958 A 20170926; US 11236341 B2 20220201; US 2017226515 A1 20170810

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**US 2015055792 W 20151015**; CN 201580067451 A 20151015; EP 15850028 A 20151015; JP 2017539515 A 20151015; KR 20177012785 A 20151015; US 201515519074 A 20151015